



Docket No. MIT8806L

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No. : 10/612,174 **Confirmation No.:** 5221
Applicants: Robert K. Reich et al.
Filed: July 2, 2003
TC/A.U.: 2826
Examiner: K. Quinto
Docket No.: MIT8806L
For: High-Speed, High-Sensitivity
Charge-Coupled Device

COMMISSIONER FOR PATENTS
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ALEXANDRIA, VIRGINIA 22313-1450

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October 20, 2004

INFORMATION DISCLOSURE STATEMENT FILED PURSUANT
TO THE DUTY OF DISCLOSURE UNDER 37 CFR §1.56, §1.97, AND §1.98

Pursuant to the duty of disclosure under 37 CFR §1.56, §1.97, and §1.98, the Applicants
request consideration of this Information Disclosure Statement.

Compliance with 37 CFR §1.97:

This Information Disclosure Statement is hereby filed under §1.97 (c) at a time prior to
the mailing date of a final action or notice of allowance.

Please apply the fee of \$180.00 under 1.17(p) to Deposit Account 19-2553. If any other
fees are required, or there are any credits, please apply such to Deposit Account No. 19-2553.

11/03/2004 FFANAI2 00000015 192553 10612174

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Information Cited:

The Applicants hereby make of record in the instant application the information listed on the attached Form PTO/SB/08A and PTO/SB/08B. The order of presentation of the references on the form is substantially chronological and should not be construed as an indication of the importance of the references. A copy of each of the listed items is enclosed.

The Applicants respectfully request that:

1. The Examiner consider completely the cited information in reaching a determination concerning the patentability of the pending claims;
2. The enclosed Forms PTO/SB/08A and PTO/SB/08B be signed by the Examiner and a signed copy returned to the undersigned Agent to evidence that the cited information has been fully considered by the Patent and Trademark Office during the examination of this application;
3. The citations for the information listed on the enclosed Forms PTO/SB/08A and PTO/SB/08B be printed on any patent which issues from this application.

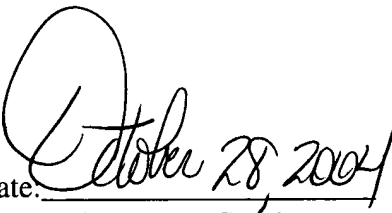
In submitting this Information Disclosure Statement, the Applicants make no representation that a search has been performed, of the extent of any search performed, or that more relevant information does not exist.

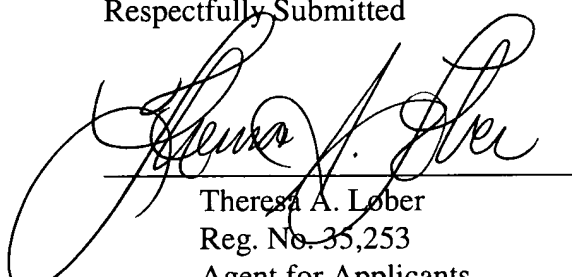
In submitting this Information Disclosure Statement, the Applicants make no representation that the information cited in the Statement is, or is considered to be, material to patentability as defined in 37 CFR §1.56(b).

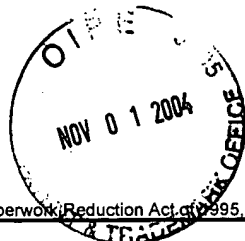
In submitting this Information Disclosure Statement, the Applicants make no representation that the information cited in the Statement is, or is considered to be, in fact, prior art as defined by 35 U.S.C. §102.

Notwithstanding any statements by the Applicants, the Examiner is urged to form his own conclusion regarding the relevance of the cited information.

An early and favorably action is hereby requested.


Date: October 28, 2004
T. A. Lober Patent Services
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Concord, Massachusetts 01742
Telephone: 978.369.2181
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Respectfully Submitted

Theresa A. Lober
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Agent for Applicants



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Substitute for form 1449/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 1 of 3

Complete if Known

Application Number	10/612,174
Filing Date	July 2, 2003
First Named Inventor	Robert K. Reich
Art Unit	2826
Examiner Name	Kevin Quinto
Attorney Docket Number	MIT8806L

U. S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
	A	US- 4,322,638	03-30-1982	Lee et al.	
	B	US- 4,322,752	03-30-1982	Bixby	
	C	US- 4,835,616	05-30-1989	Morcom	
	D	US- 5,355,165	10-11-1994	Kosonocky et al.	
	E	US- 5,754,228	05-19-1998	Dyck	
	F	US- 5,754,229	05-19-1998	Elabd	
	G	US- 5,796,433	08-18-1998	Dyck	
	H	US- 5,867,215	02-02-1999	Kaplan	
	I	US- 5,953,061	09-14-1999	Biegelsen et al.	
	J	US- 6,049,357	04-11-2000	Shinohara	
	K	US- 6,218,692	04-17-2001	Guidash et al.	
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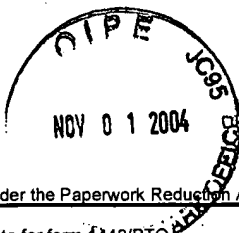
FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁶
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)				
	L	WO 97/46004	12-04-1997	Silicon Mountain Designs		

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This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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PTO/SB/08B (08-03)

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)				Complete if Known		
				Application Number	10/612,174	
				Filing Date	July 2, 2003	
				First Named Inventor	Robert K. Reich	
				Art Unit	2826	
				Examiner Name	Kevin Quinto	
Sheet	2	of	3	Attorney Docket Number		MIT8806L

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	M	FUJITA et al., "A New High-Speed Camera System for Broadcast Use - The Action Analyzer," SMPT Journal, pp. 820-823, October 1990.	
	N	REICH et al., "Integrated Electronic Shutter for Back-Illuminated Charge-Coupled Devices," IEEE Transactions on Electron Devices, Vol. 40, No. 7, pp. 1231-1237, July 1993.	
	O	KABRA et al., "180x180 Element Ultra High Frame Rate Burst Image Sensor," Proc. of the 40th Midwest Symp. on Circuits & Systems, Sacramento, CA, pp. 1423-1425, Aug. 2-6, 1997.	
	P	KOSONOCKY et al., "360x360 Element Three-Phase Very High Frame Rate Burst Image Sensor: Design, Operation, and Performance," IEEE Transactions on Electron Devices, Vol. 44, No. 10, pp. 1617-1624, October 1997.	
	Q	YATES et al., "An intensified/shuttered cooled CCD camera for dynamic proton radiography," In "Digital Solid State Cameras: Designs and Applications," Williams, Jr., Editor, SPIE Vol. 140, pp. 140-151, April 1998.	
	R	RATHMAN, "Transient Analysis of Photogenerated Charge-Carrier Collection in High-Frame-Rate Charge-Coupled Devices," MIT Lincoln Laboratory Solid State Research Quarterly Technical Report, pp. 25-30, September 1, 1999.	
	S	HARTMANN et al. "A high-speed frame store CCD for the use in optical and near infrared astronomy," In "Adaptive Optical Systems Technology," Wizinowich, Ed., Proc. SPIE Vol. 4007, pp. 493-499, 2000.	
	T	O et al., "6k-pixel 160-MHz CCD linescan sensor," In "Sensors and Camera Systems for Scientific, Industrial, and Digital Photography Applications," Blouke et al., Eds., Proc. SPIE Vol. 3965, pp. 50-57.	
	U	REICH et al., "Burst-Frame-Rate CCD Imager," MIT Lincoln Laboratory Solid State Research Quarterly Technical Report, pp. 25-29, September 7, 2001.	
	V	REICH et al., "High-Fill-Factor, Burst-Frame-Rate Charge-Coupled Device," International Electron Device Meeting and IEDM Technical Digest, pp. 567-570, December 2001.	

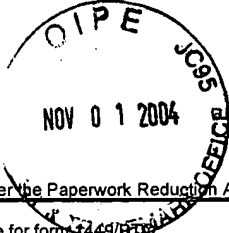
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1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

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Sheet	3	of	3	Attorney Docket Number	MIT8806L

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Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	W	REICH et al., "High-Speed Electronically Shuttered Solid-State Imager Technology," Proc. 14th Topical Conference on High-Temp Plasma Diagnostics, July 8-11, 2002, and Review of Scientific Instruments, V. 74, Part 2, pp. 2027-2031, March 2003.	

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